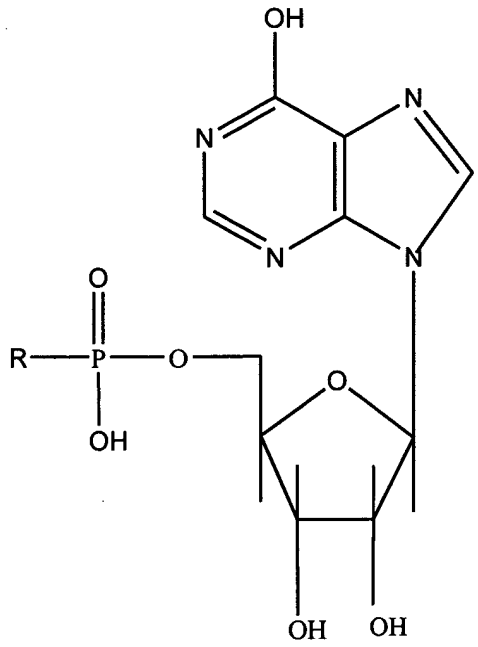
CLAIMS:

1. (Original) A pharmaceutical composition comprising an adjuvant effective amount of a protected IMP compound.

2. (Original) The pharmaceutical composition according to claim 1, wherein said protected IMP compound is an IMP compound homologue.

3. (Original) The pharmaceutical composition according to claim 1, wherein said protected IMP compound is methyl inosine 5'-monophosphate.

4. (Original) The pharmaceutical composition according to claim 3, wherein said methyl inosine 5'-monophosphate is of the formula:



wherein said R-group is a moiety selected from the group consisting of alkyl, alkoxy, arginine, and secondary amino compounds.

5. (Original) The pharmaceutical composition according to 4, wherein said R-group inhibits the hydrolysis of said protected IMP compound by 5'-nucleotidase.

6. (Currently Amended) The pharmaceutical composition according to

claim 1, further comprising a vaccine agent selected from a group consisting of proteins, peptides, coat proteins, viral coats, viruses, bacteria, antigen, whole cells, cell components, parasites, and pathogens.

7. (Original) The pharmaceutical composition according to claim 1, further comprising an additional adjuvant selected from the group consisting of cytokines, lipopolysaccarides, pluronic polymers, muramyl dipeptide, lipid A, liposomes, nonphospholipid liposomes, proteoliposomes, homopolymers, co-polymers, homo- and co-polymers of lactic and glycolic acid, lipidated peptides, aliphatic nitrogenous bases, amines, quaternary ammonium compounds, guanidines, benzamidines, thiouroniums, aluminum hydroxide, aluminum salts, mineral oil, killed microbacteria, detergent, immunostimulators, PCPP salts, aluminum phosphate gel, algal glucan, algammulin, alhydrogel, *N-N*-dioctadecyl-N^1, N^1-*bis* (2-hydroxyethyl) propanediamine, BAY R1005, Calcitriol, calcium phosphate gel, cholera holotoxin, cholera toxin B subunit, cholera toxin A1-subunit-Protein A D-fragment fusion protein, CRL 1005, cytokine-containing liposomes, DDA, Dehydroepiandrosterone, DHA, DMPC, DMPG, DOC, alum complex, Fruend's Complete Adjuvant, Freund's Incomplete Adjuvant, Gerbu Adjuvant, GM-CSF, GMDP, Imiquimod, DTP-GDP, immunoliposomes containing antibodies to costimulatory molecules, Interferon-γ, Interleukin-1β, Interleukins, Interleukin-2, Interleukin-7, Interleukin-12, Immune stimulating complexes, complexes of saponin derivatives, liposomes, loxoribine, LT-OA, MF 59, Montanide ISA Adjuvants, squalene/water emulsions, MDP, MTP-PE, MTP-PE Liposomes, Murabutide, Murametide, Murapalmitine, D-Murapalmitine, NAGO, Non-Ionic Surfactant Vesicles, Pleuran, PLGA, PGA, PLA, Pluronic L121, PMMA, Proteinoid microspheres, Poly rA, Poly rU, Polysorbate 80, Protein Cochleates, QS-21, Quil-A, Rehydragel HPA, Rehydragel LV, S-28463, SAF-1 Sclavo peptide, Span 85, Arlacel 85, sorbitan trioleate, Specol, Squalane, Stearyl Tyrosine, DTP-DPP, Thereonyl-MDP, Ty Particles, Walter Reed Liposomes, Hunter's TiterMax, Ribi's Adjuvants, Nitrocellulose-Adsorbed Proteins, Encapsulated Antigens, and

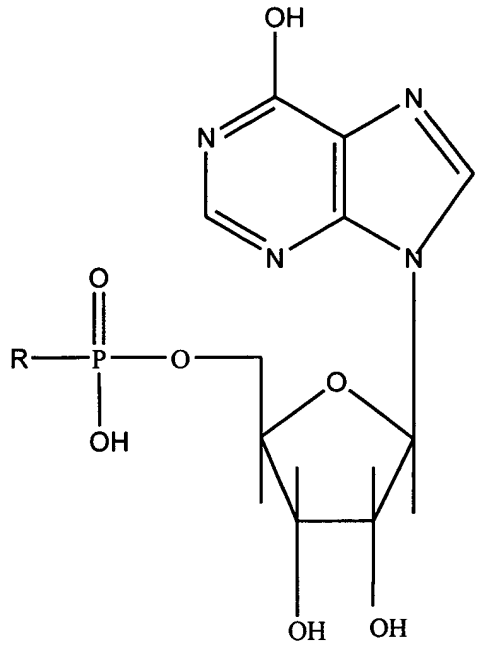
combinations thereof.

8. (Original) A pharmaceutical composition comprising an adjuvant effective amount of a protected IMP compound and an effective amount of a vaccine agent wherein said vaccine agent can be ineffective alone in inducing a therapeutic clinical response.

9. (Original) The pharmaceutical composition according to claim 8, wherein said protected IMP compound is an IMP compound homologue.

10. (Original) The pharmaceutical composition according to claim 8, wherein said protected IMP compound is methyl inosine 5'-monophosphate.

11. (Original) The pharmaceutical composition according to claim 10, wherein said methyl inosine 5'-monophosphate is of the formula:



wherein said R-group is a moiety selected from the group consisting of alkyl, alkoxy, arginine, and secondary amino compounds.

12. (Original) The pharmaceutical composition according to 11, wherein said R-group inhibits the hydrolysis of said protected IMP compound by 5'-nucleotidase.

13. (Currently amended) The pharmaceutical composition according to claim 8, further comprising a vaccine agent selected from a group consisting of proteins, peptides, coat proteins, viral coats, viruses, bacteria, antigen, whole cells, cell components, parasites, and pathogens.

14. (Original) The pharmaceutical composition according to claim 8, further comprising an additional adjuvant selected from the group consisting of cytokines, lipopolysaccarides, pluronic polymers, muramyl dipeptide, lipid A, liposomes, nonphospholipid liposomes, proteoliposomes, homopolymers, co-polymers, homo-

and co-polymers of lactic and glycolic acid, lipidated peptides, aliphatic nitrogenous bases, amines, quaternary ammonium compounds, guanidines, benzamidines, thiouroniums, aluminum hydroxide, aluminum salts, mineral oil, killed microbacteria, detergent, immunostimulators, PCPP salts, aluminum phosphate gel, algal glucan, algammulin, alhydrogel, *N-N*-dioctadecyl-N^1, N^1-*bis* (2-hydroxyethyl) propanediamine, BAY R1005, Calcitriol, calcium phosphate gel, cholera holotoxin, cholera toxin B subunit, cholera toxin A1-subunit-Protein A D-fragment fusion protein, CRL 1005, cytokine-containing liposomes, DDA, Dehydroepiandrosterone, DHA, DMPC, DMPG, DOC, alum complex, Fruend's Complete Adjuvant, Freund's Incomplete Adjuvant, Gerbu Adjuvant, GM-CSF, GMDP, Imiquimod, DTP-GDP, immunoliposomes containing antibodies to costimulatory molecules, Interferon-γ, Interleukin-1β, Interleukins, Interleukin-2, Interleukin-7, Interleukin-12, Immune stimulating complexes, complexes of saponin derivatives, liposomes, loxoribine, LT-OA, MF 59, Montanide ISA Adjuvants, squalene/water emulsions, MDP, MTP-PE, MTP-PE Liposomes, Murabutide, Murametide, Murapalmitine, D-Murapalmitine, NAGO, Non-Ionic Surfactant Vesicles, Pleuran, PLGA, PGA, PLA, Pluronic L121, PMMA, Proteinoid microspheres, Poly rA, Poly rU, Polysorbate 80, Protein Cochleates, QS-21, Quil-A, Rehydragel HPA, Rehydragel LV, S-28463, SAF-1 Sclavo peptide, Span 85, Arlacel 85, sorbitan trioleate, Specol, Squalane, Stearyl Tyrosine, DTP-DPP, Thereonyl-MDP, Ty Particles, Walter Reed Liposomes, Hunter's TiterMax, Ribi's Adjuvants, Nitrocellulose-Adsorbed Proteins, Encapsulated Antigens, and combinations thereof.

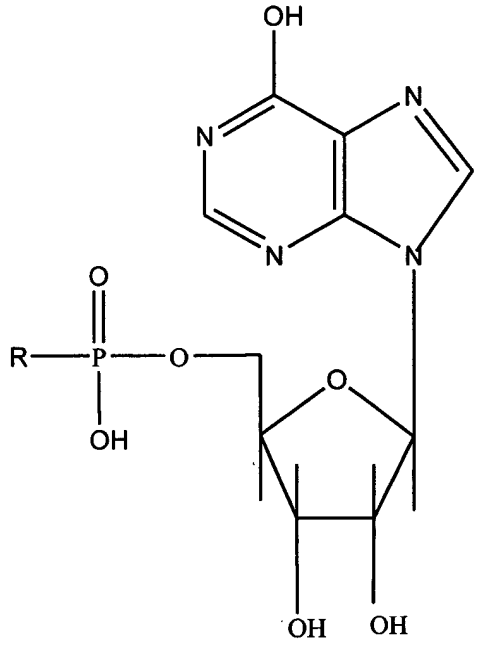
15. (Original) A pharmaceutical composition comprising an adjuvant effective amount of a protected IMP compound, vaccine, and at least one agent selected from the group consisting of antiviral agents and antimicrobial agents.

16. (Original) The pharmaceutical composition according to claim 15, wherein said protected IMP compound is an IMP compound homologue.

17. (Original) The pharmaceutical composition according to claim 15,

wherein said protected IMP compound is methyl inosine 5'-monophosphate.

18. (Original) The pharmaceutical composition according to claim 17, wherein said methyl inosine 5'-monophosphate is of the formula:



wherein said R-group is a moiety selected from the group consisting of alkyl, alkoxy, arginine, and secondary amino compounds.

19. (Original) The pharmaceutical composition according to 18, wherein said R-group inhibits the hydrolysis of said protected IMP compound by 5'-nucleotidase.

20. (Original) The pharmaceutical composition according to claim 15, further including an adjuvant selected from the group consisting of cytokines, lipopolysaccarides, pluronic polymers, muramyl dipeptide, lipid A, liposomes, nonphospholipid liposomes, proteoliposomes, homopolymers, co-polymers, homo- and co-polymers of lactic and glycolic acid, lipidated peptides, aliphatic nitrogenous bases, amines, quaternary ammonium compounds, guanidines, benzamidines, thiouroniums, aluminum hydroxide, aluminum salts, mineral oil, killed

microbacteria, detergent, immunostimulators, PCPP salts, aluminum phosphate gel, algal glucan, algammulin, alhydrogel, *N-N*-dioctadecyl-N^1, N^1-*bis* (2-hydroxyethyl) propanediamine, BAY R1005, Calcitriol, calcium phosphate gel, cholera holotoxin, cholera toxin B subunit, cholera toxin A1-subunit-Protein A D-fragment fusion protein, CRL 1005, cytokine-containing liposomes, DDA, Dehydroepiandrosterone, DHA, DMPC, DMPG, DOC, alum complex, Fruend's Complete Adjuvant, Freund's Incomplete Adjuvant, Gerbu Adjuvant, GM-CSF, GMDP, Imiquimod, DTP-GDP, immunoliposomes containing antibodies to costimulatory molecules, Interferon-γ, Interleukin-1β, Interleukins, Interleukin-2, Interleukin-7, Interleukin-12, Immune stimulating complexes, complexes of saponin derivatives, liposomes, loxoribine, LT-OA, MF 59, Montanide ISA Adjuvants, squalene/water emulsions, MDP, MTP-PE, MTP-PE Liposomes, Murabutide, Murametide, Murapalmitine, D-Murapalmitine, NAGO, Non-Ionic Surfactant Vesicles, Pleuran, PLGA, PGA, PLA, Pluronic L121, PMMA, Proteinoid microspheres, Poly rA, Poly rU, Polysorbate 80, Protein Cochleates, QS-21, Quil-A, Rehydragel HPA, Rehydragel LV, S-28463, SAF-1 Sclavo peptide, Span 85, Arlacel 85, sorbitan trioleate, Specol, Squalane, Stearyl Tyrosine, DTP-DPP, Thereonyl-MDP, Ty Particles, Walter Reed Liposomes, Hunter's TiterMax, Ribi's Adjuvants, Nitrocellulose-Adsorbed Proteins, Encapsulated Antigens, and combinations thereof.

21. (Original) The pharmaceutical composition according to claim 15, further comprising a vaccine agent selected from a group consisting of proteins, peptides, coat proteins, viral coats, viruses, bacteria, antigen, whole cells, cell components, parasites, and pathogens.

22. (Original) A vaccine formulation comprising an adjuvant effective amount of a pharmaceutical composition according to claim 1, 8, or 15.

23. (Original) The vaccine formulation according to claim 22, wherein said vaccine formulation treats and affects agents selected from a group consisting of bacteria, viruses, and pathogens.

24. (Currently amended) A method of treating influenza by administering an effective amount of a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

25. (Currently amended) A method of treating an HIV infection by administering an effective amount of a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

26. (Currently amended) A method of treating or preventing an infection by administering an effective amount of a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

27. (Currently amended) A vaccine composition for generating enhanced T-cell immune activity against an infectious agent comprising a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

28. (Original) The vaccine composition according to claim 27, wherein the infectious agent is selected from the group consisting of viruses, bacteria, influenza, HIV, hepatitis B, hepatitis C, smallpox, anthrax, and other pathogens.

29. (Original) A method of enhancing immune resistance to infectious agents by administering an adjuvant effective amount of a protected IMP compound.

30. (Currently amended) A method of enhancing immune response resistance to infectious agents by increasing T-cell activity through the administration of an effective amount of a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

31. (Original) The method according to claim 30, further including the step of adding an antiviral and microbial agent to yield a more effective immune response.

32. (Currently amended) A method of treating elderly individuals to prevent or to cure an infection by administering an effective amount of a pharmaceutical composition ~~of~~ according to claims 1, 8, or 15.

33. (Original) A method of treating an infection in a subject by increasing

T-cell activity; and potentiating an immune response by administering an adjuvant effective amount of a protected IMP compound.

34. (Currently amended) A method of affecting an immune response to an antiviral and microbial agent by potentiating an immune response by administration of an effective amount of a pharmaceutical composition ~~as in~~ according to claims 1, 8, or 15.

35. (Currently amended) A method of treating an individual exposed to a bioterrorist attack with such organisms as anthrax or smallpox by administering an effective amount of a pharmaceutical composition according to ~~as in~~ claims 1, 8, or 15.

36. (Original) A method of potentiating T-cell immunity by administering an effective amount of a protected IMP compound and inhibiting IL-10.